

**EVALUATING EMERGENCY MANAGEMENT IMPROVEMENT
OPPORTUNITIES FOR
FIRE PROTECTION DISTRICTS IN CLACKAMAS COUNTY**

**STRATEGIC ANALYSIS
OF
RISK REDUCTION**

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ABSTRACT

This research project analyzes how Clackamas County Fire District #1 may be able to improve its efforts in emergency management and also contribute to an integrated emergency management system county-wide. In the past, most local governments assumed that their county emergency management system would provide the majority of the disaster support services needed by local governments. However, within a 12 month period in 1995 - 1996, two floods and a major windstorm struck the county and proved this assumption to be incorrect. The problem Clackamas County Fire District #1 faces is that it does not have a clear understanding of its role within the Clackamas County integrated emergency management system.

The purpose of this research project is to provide Clackamas County Fire District #1 with a clear definition and understanding of emergency management, and its roles and responsibilities within the Clackamas County Emergency Management system.

The research will employ evaluative research methods and analyze and evaluate the following questions: (1) What areas, in addition to emergency operations, can Clackamas County Fire District #1 contribute to the Clackamas County's integrated emergency management system? (2) Through partnerships and cooperation with Clackamas County and others, can Clackamas County Fire District #1 gain a synergistic effect for its constituents through a county-wide emergency management system? (3) What are the forces which facilitate and hinder a county wide emergency management system? (4) How can Clackamas County Fire District #1 help to insure an efficient, effective and coordinated emergency management system during times of catastrophic disasters?

The intent of the research procedure was to evaluate and analyze improvement opportunities for Clackamas County Fire District #1 in the area of emergency management. This project defined emergency management, disaster, comprehensive emergency management, and an integrated emergency management system. The project also discussed the limitations and assumptions that exist.

The result of the research was that Clackamas County Fire District #1 could make many improvements in its effort toward emergency management. It was discovered that the fire district probably did a good job in the response phase, but needed more effort in the areas of mitigation, preparedness, and recovery.

The principle recommendations resulting from this research project are: (a) that the fire district needed to change its paradigm from viewing their role as primarily emergency response to a more comprehensive approach that also includes mitigation, preparedness, and recovery, (b) and, that an integrated emergency management system that included partnerships with other agencies, using a team-oriented approach, will be the most efficient and effective method.

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INTRODUCTION

Clackamas County Fire District #1 is one of the most progressive and dynamic fire agencies in Oregon. It is a proactive leader in providing efficient and effective fire protection services to the community. Clackamas County Fire District #1 serves the southern portion of the metropolitan region of Portland, Oregon. It is comprised of urban, suburban and rural lands and serves approximately 150 square miles with an estimated population of 120,000 (Appendix A). Clackamas County Fire District #1 has evolved over the last ten years through mergers and consolidations of six former fire districts and one city fire department. This rapid growth transpired during a time when the political and economic environment was demanding an increase in efficiency and effectiveness within government. Clackamas County Fire District #1 provides a wide array of suppression, rescue, advanced life-support EMS and fire prevention services. Over the past two years, a new strategic planning process was implemented within the fire district. The intent of this effort is to re-focus the fire district's vision and goals so as to add more value to the community. The fire district has identified numerous improvement opportunities including the need for a more comprehensive approach to disaster preparedness. Oregon law places the primary responsibility for emergency management at the county government level, but allows cities and other local governmental organizations to be involved in the process.

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Clackamas County Emergency Management system.

Evaluative research methods are used to analyze and evaluate the following questions:

1. What areas, in addition to emergency operations, can Clackamas County Fire District #1 contribute to the Clackamas County's integrated emergency management system?
2. Through partnerships and cooperation with Clackamas County and others, can Clackamas County Fire District #1 gain a synergistic effect for its constituents through a county-wide emergency management system?
3. What are the forces which facilitate and hinder a county wide emergency management system?
4. How can Clackamas County Fire District #1 help to insure an efficient, effective and coordinated emergency management system during times of catastrophic disasters?

BACKGROUND AND SIGNIFICANCE

Clackamas County Fire District #1 is a progressive fire service organization which is open to change. Since 1989, Clackamas County Fire District #1 has merged or consolidated seven smaller fire departments into one organization. During the past ten years, Clackamas County Fire District #1 has been alert and open to opportunities and has been able to improve fire protection service to the community. Because of Clackamas County Fire District #1's ability to recognize and participate in a dynamic political environment, it is viewed as a leader in local government issues. Clackamas County Fire District #1 serves more than 35% of the county's population and it provides the most

comprehensive fire, EMS, and fire prevention service within the county. Clackamas County Fire District #1 takes pride in being a local government leader within the metropolitan region.

Approximately two years ago, the long time fire chief retired, and his successor is attempting to continue this leadership role. A strategic planning process has been instituted by the new chief in an effort to improve on our past successes and to expand the fire district's emergency service role and responsibility. This planning process has identified many opportunities for improvement within the fire district. One important area identified was disaster preparedness and emergency management. Up to this point in time, Clackamas County Fire District #1 has mainly focused on emergency response improvements.

Oregon law delegates local disaster preparedness to the county governments (ORS 401.305, 1995). This process requires that all requests for disaster assistance from cities or other local agencies be directed through the County Emergency Management Agency before they can be processed at the state or federal level. Within Clackamas County the County Sheriff is officially the designated Emergency Manager for the County. The Sheriff has one full time staff person to coordinate this effort.

At the present time the County has adopted an Emergency Operations Plan which defines its policy and provides an overview of each agency's responsibilities. The Emergency Operation Plan is intended to be a comprehensive strategic document, not a tactical game plan for a disaster situation. Approximately two years ago Clackamas County suffered through two floods and a major wind storm which caused extensive damage to some of the most affluent areas within the county. These events caused many city governments and local fire agencies to question Clackamas County's Emergency Operations Plan. Their expectations of the county's role during an emergency were different than their

experiences. For the past two years, many of these cities and fire agencies have been attempting to reconcile these differences.

The disasters illuminated how unprepared most cities and fire agencies were. There has been quite a bit of finger pointing over the past two years; fortunately, this initial response has given way to a more cooperative effort to improve the Clackamas County Emergency Management System. The hope is that this effort will positively impact the overall health and safety of the residents of Clackamas County.

This Executive Fire Officer research project is directly related to the Strategic Analysis of Community Risk Reduction course because it attempts to address how best to prepare, mitigate, and prevent injury and damage to the community through the development of a comprehensive emergency management system. Disaster preparedness is a very good example of a prevention program. It attempts to prevent, plan and mitigate catastrophic disasters which may overwhelm local governments.

There is an expectation, both internally and externally, that Clackamas County Fire District #1 should actively participate and contribute to regional emergency management and disaster preparedness process. During the past two years it has become clear to many other local governments within county that there is a need to be better prepared for catastrophic disasters in the future.

In addition to its leadership responsibility, Clackamas County Fire District #1 also needs to develop a clearer understanding of its role in emergency management during a catastrophic disaster. Because geopolitical boundaries are not based on emergency operational considerations, many disaster scenarios will most certainly become multi-agency events and it is probable that significant portions of the fire district may be isolated from the normal command and control structure.

The Strategic Analysis of Community Risk Reduction course provides the information necessary to build community coalitions and partnerships that will be necessary to accomplish an effective emergency management system within Clackamas County. This research project is specifically related to Clackamas County Fire District #1 because it is attempting to clarify the fire district's role in emergency management, and provide strategies which will better define the multi-disciplinary nature (ie. mitigation, planning, response and recovery) of emergency management.

LITERATURE REVIEW

History of Emergency Management, 1950's to the Present

"People have always devised strategies for coping with disaster: forms of mitigation, preparedness, response and recovery have existed as long as human society has" (Drabek & Hoetmer, 1991 p.3). This research project will focus on the emergency management practices in the U.S. over approximately the last fifty years. Emergency Management in the U.S. has been derived from two principle sources: (1) From the federal government's response to natural disasters, and (2) civil defense programs which began about the time of the second world war and intensified during the cold war (Drabek & Hoetmer, 1991).

Natural Disaster Efforts:

In 1950, the Federal Disaster Act was passed; prior to this time there was no clear mandate for the federal government to be involved with regional or local disasters. There had been numerous individual laws passed providing disaster assistance, but the Disaster Act was the first comprehensive

legislative effort to define the federal government's role in disaster assistance (Drabek & Hoetmer, 1991). The intent of this law was to approach disaster assistance in a coordinated and systematic fashion. Unfortunately, catastrophic disasters such as, 1964 Alaska earthquake, hurricanes and tropical storms in the 1960's and early 70's, and a large California earthquake in 1972, all produced special legislation. These legislative interventions fragmented the existing 1950 Disaster Act and confused state and local emergency management officials. Ultimately, the Disaster Relief Act of 1974 was passed. This Act authorized assistance for both federal and state disaster preparedness and warning programs, and the creation of the Federal Disaster Assistance Administration, the predecessor to FEMA (Drabek & Hoetmer, 1991).

Civil Defense Efforts:

Defense of a sovereign nation has always been a primary purpose for government. This principle, some argue, may be the only true purpose of government. Over time it has produced efforts like the Great Wall of China, medieval castles being built on high ground, and caused enormous resources to be expended to maintain a standing army at the ready. Modern technology has made it increasingly difficult for a nation to provide a safe haven to its citizens by simply building barriers. Airplanes and missiles are now capable of carrying weapons of mass destruction, making everyone and everywhere vulnerable to potential disaster. This reality gave rise to the 1950 Federal Civil Defense Act, and the Federal Civil Defense Administration (FCDA) (Drabek & Hoetmer, 1991). The initial efforts of the FCDA were met with political resistance; however, two important ideas were successfully introduced: (1) civil defense should be regarded as "national survival insurance", and (2) civil defense activities like disaster planning, rescue, and relief have a peacetime value (Drabek & Hoetmer, 1991).

Through the 1950's, 60's, and 70's, the debate continued over what should be the proper role for civil defense programs. In 1977, the National Governors Association presented a unified front and called for fundamental change in FCDA programs (Drabek & Hoetmer, 1991).

In 1979, President Carter created, by executive order, the Federal Emergency Management Agency (FEMA) (Drabek & Hoetmer, 1991). This new agency consolidated the disaster assistance functions for both civil defense and natural disasters. The over-arching vision for FEMA was to provide a comprehensive emergency management (CEM) approach to all types of disasters. The new FEMA effort was met with some uncertainty during the Reagan years of the 1980's, because of their many concerns about national defense issues (Drabek & Hoetmer, 1991). As the partisan political debate continued, the phrase "population protection" replaced the controversial concept of "crisis relocation planning" which transitioned into part of the all-hazard approach of disaster assistance.

This approach became the planning framework for the integrated emergency management system (IEMS) (Drabek & Hoetmer, 1991). The integrated emergency management system approach consolidated the all-hazard concept, which was implemented by the emergency management profession (Drabek & Hoetmer, 1991). FEMA's has been building and refining the principles of CEM and IEMS for the last 20 years (Drabek & Hoetmer, 1991).

Partnerships and Cooperation

Partnership between private, public and not-for-profit organizations will probably increase in the future (Goldsmith, 1997). Former rivals and competitors will need to cooperate to meet the public's expectation for quality service (Snead & Porter, 1996).

It has become obvious that many of our constituents are not fully aware that their fire

department has become a multifaceted emergency service agency. Unfortunately, this places the fire service at a political disadvantage. The fire service lags behind in marketing and public education. These two elements need to be combined into a comprehensive strategy to help shape the public's perception of fire related issues (Bruegman, 1994, p. 48).

In their book, *Banishing Bureaucracy*, David Osborne and Peter Plastrik (1997) make a case for reinventing government. They believe the first step in banishing bureaucracy is for governments to determine their precise purpose, and then focus their activities on that purpose. They submit many functions which have become part of the government, should not be. Governments should clear their deck of functions which do not bring clarity of purpose. In short, many elements of government should be privatized.

The mayor of Indianapolis, Stephen Goldsmith (1997), is a practitioner of this theory. Since 1992, he has sought competitive bids for over 70 city services and reduced the non-public safety work force by 40%. He believes competition is the answer, and points out that many of 70 plus bids have been awarded to city departments because they were able to compete with the private sector and provide better service for less money.

On the other side of the coin, the fire service's product is public safety. In many communities this includes fire suppression, fire prevention, emergency medical services (EMS), rescue, emergency management, etc. These services are provided to the community as a whole. The theory is that providing these services adds value to the community by making it a safer place to live and work. The fire department is a community service and it is not designed or necessarily intended to provide individual protection. In fact, the fire department's true value comes from mitigating or controlling

hazardous situations, thereby minimizing the cost to the community. For example, most fires that free burn for any appreciable length of time destroy much of the personal property of an individual, such as the structure and its contents. However, fire departments are quite efficient at containing this destruction to the room or structure of origin and preserving the value of other exposed properties and the surrounding community. Therefore, the fire department minimizes the community's losses, even though the fire may have destroyed the original house completely. The fire department's role in emergency management is the same, that is, to minimize the community's losses.

The fire service is not a business, because there is no direct profit or product to be sold. Its stock and trade is to maintain and, hopefully, improve the fire and life safety within the community. This does not mean we could not profit by becoming more businesslike, efficient and effective (Coleman, 1997). All organizations need to strive to improve their service to the customer - the fire service is no exception.

Perhaps one of the most frustrating parts of being an executive fire officer is to visualize a necessary objective for the organization and be unable to convince the organization to adopt the change. Firefighting by its nature is a team-oriented effort. Why then, is it so difficult, as a manager, to make the team approach work? The probable answer is that our objectives may not be clear (Arnold, 1996).

Marketing

As a public agency, the fire district serves the public's interest, and the mission is to protect the lives and property within the community. The fire service deals with individual incidents, but our mission is protecting the overall community. This makes the job of measuring our customer's satisfaction difficult. One of the best ways to succeed at the customer-value game is talking to our customers

(Fagiano, 1997). The fire service is uniquely positioned to accomplish this task because we have the advantage of being well thought of and respected. People like us. Therefore, by taking advantage of our public encounters, we can educate and enlighten our constituents about how we serve them, which will reinforce and strengthen our goodwill with them.

We also need to be more savvy marketers about the many types of services we provide to the community. By taking advantage of news making events, we can reinforce fire and life safety behaviors of people, and expand the community's knowledge of how we serve them (Peak, 1997). This is a method of tapping into their "delight factor" (Mitchell, 1996). The fire service tends not to toot its own "air-horn" very well. These are missed opportunities to inform and educate the public. Perception is reality - if our customers believe we add value they will support us (Zemke, 1997). However, if we ignore the customer, or assume they understand the value fire service adds value to the community, it may kill us (Massnick, 1997). We must pay attention to the customer.

PROCEDURES

Definitions:

Comprehensive Emergency Management (CEM) - is a way of fitting together the many elements of emergency management into an inclusive framework that encompasses all hazards and all levels of government (as well as the private sector). It includes four phases: mitigation, preparedness, response, and recovery (Drabek & Hoetmer, 1991, p. xx).

Integrated Emergency Management System (IEMS) - is the way of spelling out CEM. On the strategic side, IEMS requires that a community undertake a hazard and risk analysis, assess its current

capabilities in the areas of mitigation, preparedness, response, and recovery, and devise steps to close the gap between existing and required levels of capability (Drabek & Hoetmer, 1991, p.xxi).

Disaster - is an unforeseen, ruinous, and often sudden misfortune that happens either through lack of foresight or through some hostile external agency (Webster's, 1985).

Emergency Management - the discipline and profession of applying science, technology, planning and management to deal with extreme events that can injure or kill large numbers of people, do extensive damage to property, and disrupt community life (Drabek & Hoetmer, 1991, p. xvii).

Research Procedures

The intent of this research project is to evaluate and analyze improvement opportunities for Clackamas County Fire District #1 in the area of emergency management. The evaluative research methodology will be used to analyze and evaluate this process.

As previously discussed Clackamas County Fire District #1 has been consolidated from seven smaller fire departments over the last ten years. This growth process has been very dynamic, at times it has seemed that the only constant has been change itself. Two years ago, Clackamas County Fire District #1 appointed a new fire chief to replace the long-time chief who retired. Soon after the new chief arrived, a strategic planning effort was initiated. This planning process was used as a tool to evaluate Clackamas County Fire District #1's past performance and establish future goals for the organization. This effort identified an improvement opportunity in the area of emergency management.

Clackamas County Fire District #1 has always actively participated and is considered as a leader in rescue and emergency response within Clackamas County. Clackamas County Fire District #1 has always attempted to take a proactive approach during times of disaster situations and, on a

number of occasions, has established impromptu emergency operations centers whenever conditions seemed appropriate. Clackamas County Fire District #1 has also completed a structural engineering and construction update of all of its fire stations to assure that they meet the earthquake standards of the current Uniform Building Code.

Clackamas County Fire District #1 is also an active member of the Clackamas County Fire Defense Board. This Board is comprised of the Fire Chief of each fire jurisdiction within the county. Their charge is to deal with issues that cross over geopolitical boundaries within the county. The issues include, mutual and automatic aid agreements, coordination of fire resources for the Oregon Fire Service Mobilization Plan, and other matters concerning fire and life safety issues which affect the fire service county-wide. Both Clackamas County Fire District #1 and the Clackamas County Fire Defense Board have concentrated most of their efforts on the emergency response phase of emergency management, leaving mitigation, planning and recovery efforts to other agencies.

The desired outcome of this research project is to improve Clackamas County Fire District #1's understanding of the elements necessary to have a comprehensive approach to emergency management and to more fully appreciate the value of an integrated emergency management system. This evaluative research method was applied to the real-world of Clackamas County, Oregon, and the manner in which fire protection and emergency management services are presently being provided.

Assumptions and Limitations

This research project makes the basic assumption that the fire department should provide a full service fire protection system to the community it serves. The "fire protection" model implies using a

systematic approach of providing fire and life safety services which include prevention, suppression, EMS and emergency management. Fire prevention and emergency management are proactive approaches because they have the potential to minimize losses and preserve both life and property. Emergency response is a reactive approach. The unfortunate reality is that no matter how effective and efficient the response forces may be, the damage has already been done, and the best that can be hoped for is to minimize the damage.

This project also assumes that a Comprehensive Emergency Management approach and an Integrated Emergency Management System are the best methods of accomplishing Clackamas County's goal of providing good emergency management services to the region. These principles allow the latitude to adapt the Clackamas County Emergency Operations Plan to the individual needs of local governments. By adopting this approach, the issue of what framework to use can be disposed of and everyone's efforts can be focused on how to most effectively and efficiently develop a county or region wide system. Emergency management efforts are a legitimate function of local government; however, small cities or other independent public agencies usually do not have the necessary resources to adequately deal with major disaster events on their own.

RESULTS

The purpose of this research project is to analyze and evaluate Clackamas County Fire District #1's efforts in the field of emergency management and identify improvement opportunities for the future, which will help to develop a county-wide integrated emergency management system.

Answers to Research Questions:

Research Question 1. By using the framework of comprehensive emergency management, the fire district can evaluate its contribution to the county-wide emergency management system. An analysis of Clackamas County Fire District #1's current participation in the four phases of emergency management (mitigation, preparedness, response, and recovery) will be compared to the possible improvements that should be made.

Clackamas County Fire District #1 has not taken a very active role in the local emergency management issues in Clackamas County in the past. This is generally true about most cities and other fire agencies within the county. Most local governments within the county have been content to assume that the Clackamas County emergency management system would satisfy their needs. Then in late winter 1996, the local area experienced a hundred year flood event. Unfortunately, many cities and other local governments found out how ill-prepared they were. They also realized that their assumptions about the county's emergency management system was in error. This experience served as a wake-up call for many local governments within Clackamas County. The lessons learned by local governments were that emergency management systems only work properly if you prepare in advance of the disaster event.

Clackamas County Fire District #1 now realizes that the best approach is to actively participate in a comprehensive and integrated emergency management system (Drabek & Hoetmer, 1991). This means that the fire district will expand their traditional focus to a more comprehensive approach.

Mitigation, planning and recovery phases of emergency management can all be viewed as improvement opportunities. Clackamas County Fire District #1 has already made some attempts at improving their own preparedness with structural upgrades to their physical plant. There has also been some basic training for all the firefighters in the area of emergency notification and communication. Also, some community based training and education programs such as Community Emergency Response Training (FEMA, 1994) and other community education programs like the new Project Impact (FEMA, 1997) are being provided. This type of approach provides the public with a better understanding of what to expect and how to properly prepare for disaster situations.

Planning has been done by Clackamas County Fire District #1 for its internal emergency management needs. Plans for a fire operations center have been completed along with some other types of contingency planning. However, more detailed plans need to be completed so as to better integrate Clackamas County Fire District #1's emergency operations plan into the county-wide emergency management system.

Recovery is usually considered a long term process after the disaster event (Drabek & Hoetmer, 1991). For the most part this is true, but there are still opportunities for emergency service providers like Clackamas County Fire District #1 to be involved. The fire district should participate in a support role in this process. This experience will help the fire district to more completely understand the full breadth of disaster events, and it is also an opportunity to be actively involved as a contributing

member of the integrated emergency management system.

Research Question 2. Clackamas County is officially designated as the local emergency management agency by state law (ORS 401.305, 1995). The county has taken an active role in emergency management since the early 1950's and has an established and comprehensive Emergency Operations Plan. Given these two facts, Clackamas County Fire District #1 should analyze and identify ways it may be able to contribute and add value for its constituents by contributing to the county-wide emergency management system.

There is a common understanding and acceptance that the fire service has a role to play in emergency management during times of disaster. However, there seems to be very little consensus from one fire agency to another about what this role should be. It appears to be based on tradition and accepted local practices.

In Oregon, state law delegates this authority to each county government. It also allows incorporated cities to enact their own emergency management programs but requires them to coordinate these efforts with the county system. Oregon law states all disaster declarations from local governments must be signed by the appropriate county commission before they can be passed up to the state level (ORS 401.325, 1995). This assumes that the local (and closest) resources are used first before requests are made to the state. This also encourages local governments to be proactive by developing less costly planning and mitigation efforts.

At the local level, the County is the one common governmental authority, so it only makes good sense to organize under this authority. The synergistic effect comes from when dozens of independent local government agencies pool their significant resources to solve a common problem such as

emergency management. It has been the author's experience that emergent need usually produces cooperation within the participants. The County and other agencies interested in emergency management issues need to give focus to the reality that without a strong cooperative effort from all local governments it will be very difficult to meet the challenges of a significant disaster within the county. However, with this cooperative effort much more can be accomplished by the group than by any individual agency or community.

Research Question 3. By identifying and analyzing the factors which hinder and/or facilitate an effective county-wide emergency management system, strategies can then be developed to minimize the hindering forces and maximize the positive aspects of the system.

Hindering Factors:

- Clackamas County has a diverse geo-political make-up. The county is governed by many different types of local government agencies with mandates and interests that range from small full-service cities to rural fire districts. In many areas of the county, fire, water, sewer, roads, etc. are all provided by local and independent governmental entities. Most of these agencies tend to view protecting their own self-interest as a top priority. In Clackamas County, the population transitions from urban, to suburban, to rural and within these areas there are more than a dozen separate and independent fire jurisdictions. With this diverse mix, it is easy to imagine why consensus may be difficult to attain.
- The "traditional ethic" of the fire service is to respond to any fire related emergency and to help whenever possible. This ethic fits easily into the response phase of a disaster situation, but does not expand well into the other three phases of mitigation, planning, and recovery needed for a

comprehensive approach to emergency management. In general, the fire service is not comfortable admitting that rescue and emergency response may not always be the first priority. For example, if the infrastructure is so badly damaged by a disaster, emergency response may simply be impossible, and the first priority will be repair of the transportation and water supply systems.

- This professional egocentrism of emergency service providers sometimes makes it difficult to establish appropriate priorities. Participation in a comprehensive emergency management process may limit the normal authority that fire agencies enjoy during routine emergency situations. This narrow point of view can make it difficult for these agencies to accept the necessity for an integrated emergency management system which deals with the normally mundane issues of food, water, shelter, transportation, health, safety, etc. In disaster situations however, water, food and shelter may be the highest priority.
- Until recently, there has not been a clear vision of what an integrated emergency management system should be. In the 1990's FEMA assumed a leadership position and is now starting to get its message out to state and local governments around the nation.

Facilitating Factors:

- Clackamas County Fire District #1, and the fire service in general, has a natural role to play in emergency management. At the operational level of any imaginable disaster the fire department will, undoubtedly, be on the front lines and everyone expects this to be the case. This will allow the fire service to be seen as a leader in this effort. Skills such as, incident command will also become invaluable during times of disaster. However, being a leader does not always mean

being the incident commander; it may also mean having a subordinate role within the Incident Command System (ICS). In some situations, the support function of the Operations Branch may be the most appropriate position for emergency service agencies.

- The State of Oregon has adopted a state-wide mobilization plan for conflagration situations in the state (OSFM, 1995). The purpose of this plan is to facilitate a rapid and effective mobilization of fire departments throughout the state. This plan is similar to an integrated emergency management system, except it is narrowly focused on fire protection support. The reason this is a facilitating factor is because this plan is so well accepted and enthusiastically supported by the fire service in Oregon, and therefore, it could be used as a model for producing an integrated emergency management system within Clackamas County. Much of the past and current difficulties in developing a county-wide comprehensive plan has been the ability to get the necessary political and emotional "buy-in" from the diverse group of stakeholders, this has been especially true of the fire agencies. It seems each agency has a unique set of priorities for its own community and they feel honor-bound to be strong advocates for their parochial interests. By using the Oregon Fire Service Mobilization Plan as a model, fire agencies may be able to more fully appreciate the type of cooperative effort that is needed to form an integrated emergency management system in the county.
- Another significant facilitating factor is the leadership that FEMA has demonstrated in the 1990's. FEMA has been able to consolidate its vision and mission into an effective and accepted program. The perennial struggle between civil defense versus natural disaster preparedness has hopefully been laid to rest. The current FEMA approach of developing one

universal approach to Comprehensive Emergency Management and an Integrated Emergency Management System seems to have been internalized by the stakeholders. FEMA's strong effort to respond quickly and proactively has helped to silence many of its former critics. In addition, FEMA has begun some effective public education campaigns, such as Community Emergency Response Team (CERT) training and Project Impact. CERT is basically a citizen self-help training program to improve individual preparedness during times of disaster (FEMA, 1994). In addition to presenting practical disaster survival skills, CERT also informs people about the reality that emergency response agencies may be delayed for hours or possibly days. Project Impact is a new effort by FEMA to show communities the value of prevention and preparation. The basic theme is that a strong mitigation effort by a community can effectively prevent damage and minimize much of the human suffering that occurs in disaster situations. Project Impact attempts to place the responsibility for mitigating known or expected disaster problems at the local government and individual level, instead of the current expectation of having the federal government come in and pick up the pieces afterward (FEMA, 1997).

Research Question 4. Clackamas County Fire District #1 has evolved into a fire service leader in Clackamas County over the past decade. Because of the fire district's rapid growth, it has placed many important issues on hold, until there was time to deal with the details. Unfortunately, adequately addressing a comprehensive approach to emergency management has been one of those details. Clackamas County Fire District #1 should form partnerships with the County and other interested participants to resolve emergency management issues in the future.

Clackamas County Fire District #1 presently provides fire protection services to three

incorporated cities; however, the City of Milwaukie is the only full service city. Milwaukie is also the only city with a stand alone emergency operations plan. This plan is similar in format to the county plan except that is specific to the city and is not coordinated with any other regional effort. Clackamas County Fire District #1 has been asked by the City of Milwaukie to help update and test their emergency operations plan. This may cause difficulties because Clackamas County Fire District #1 provides fire protection services for over 150 square miles, and the City of Milwaukie is approximately 6% of this area and about 17% of the total population of the fire district. Because of Clackamas County Fire District #1's fiduciary responsibility to provide somewhat equal protection to all of its constituents, it would be difficult for the fire district to have two different emergency management systems. Disasters, by their very nature, are unpredictable and it would be unwise to expect them to follow jurisdictional boundaries. Therefore, an attempt should be made to coordinate and integrate the two plans into one integrated emergency management system wherever possible. In this situation, the fire district probably can influence the city to modify their plan so it will fit more closely into the county plan. Since these plans are similar in many ways, it is more an issue of local pride and custom than significant difference.

If the plans are well coordinated, there should be a better chance for a good outcome during disaster events. This situation would also minimize redundancy in the system, improve coordination and communication, and be less costly for all agencies.

DISCUSSION

Renewed Interest in Emergency Management

Clackamas County activated the emergency management system three times within one twelve month period about two years ago. On December 1995, a windstorm hit. In February 1996, a flood occurred that surpassed the one hundred year flood predictions, and then in December 1996, another significant flood occurred. These events all increased everyone's interest in disaster preparedness. It was the general consensus that improvements could be made within the Clackamas County Emergency Management System. In an effort to solve the problem, one city within the county funded and staffed a new Emergency Management Program. Clackamas County Fire District #1 also elevated emergency management into one of their primary staff functions. Another neighboring fire district helped to coordinate and implement a multi-jurisdictional emergency management system.

The floods and windstorm made it very clear to a number of the cities and other local jurisdictions within the county that it is too late to develop a good emergency plan during the response phase of a disaster (McCormick, 1997). Much of the frustration that occurred during these events was from the fact that cities and other local jurisdictions did not have a clear understanding of the Clackamas County Emergency Operations Plan (Clackamas County, 1998). For the most part, they had unrealistic expectations of the type and quality of support that was available during times of a county wide emergency. During the post emergency analysis, everyone agreed that our ability to share and coordinate resources throughout the county was a weakness in the emergency management system.

On the positive side, there appears to be a new spirit of cooperation among the local fire

agencies concerning the emergency management system. An effort has been started to adopt a new "Cooperative Assistance Agreement", which will minimize or eliminate many of the above mentioned problems. Although this agreement only deals with emergency fire operations, it will help coordination efforts during the emergency response phase of a disaster (Clackamas County Fire Defense Board, 1997). This agreement puts into place the "closest forces" concept and would eliminate many of the jurisdictional debates that presently take place. The initial draft of the agreement has been signed by most of the County Fire Defense Board members; however, some believe there is still too much "wiggle" room in the agreement for it to be an effective tool.

The Current Situation

It has been almost two years since Clackamas County has used its emergency management system. However, there is still a palpable interest in improving the system and correcting past problems. This is an encouraging sign for the future of disaster preparedness in Clackamas County. In the spring of 1998, the Clackamas County Fire Defense Board requested that a fact finding group be appointed to assist the County Emergency Management Coordinator in evaluating the county's emergency management system. A task force was formed soon afterward and this group has been working on the issue, and expects to present a report in the beginning of 1999.

This new interest in cooperatively improving the Clackamas County emergency management system is a significant shift from the ambivalence that previously existed. Much of this new interest has been sparked by initiatives from the Federal Emergency Management Agency. Programs such as, Community Emergency Response Team and Project Impact are good examples of this effort. The CERT program encourages the private citizen to learn basic survival skills and preparedness techniques

to be self-sufficient for at least three days after a disaster. The other important message that is delivered is that a catastrophic disaster may and very possibly will disable most, if not all normal emergency and essential services. The reality is that police, fire, emergency medical, water, power, transportation routes, and electrical service will all be impacted by the same disaster and may be disabled or unable to reach victims for days. These realities have not been well emphasized in the past, and the public's expectation has been that local, state and federal disaster relief would take care of their needs.

The new FEMA program, Project Impact: Building a disaster resistant community, educates the public by emphasizing the need for self-reliance and strong local community involvement in preparedness. Project Impact focuses on the community's need to mitigate the hazards of disasters before they occur.

RECOMMENDATIONS

The overriding recommendation is that the fire service needs to shift its paradigm away from a primary focus on emergency response, toward a broader vision of fire protection. This means we need a cultural correction in the fire service's minds-eye which will allow us to more fully appreciate alternative strategies to preserving lives and property. In the past, there seemed to be little energy expended toward consolidating various local fire agencies into a team for providing a comprehensive and coordinated approach toward emergency management. If we intend to make a significant impact on the fire and life safety within our communities, we must learn to be proactive and focus all of our fire protection knowledge, skills and abilities on the common mission of protecting lives and property every

way we know how. In some cases, this may mean there is a need to share resources with our neighbors and at times, be willing to subordinate our emergency response tendencies to the more important mission of providing strong well coordinated support to an integrated emergency management system.

The true purpose of comprehensive emergency management and an integrated emergency management system is to produce a team approach for dealing with emergency management issues. As it is described in motivational literature, team means Together Everyone Accomplishes More. An integrated emergency management system is such a large effort, no single agency can hope to manage it without a well coordinated effort and a lot of help from a wide array of public and private resources. With an integrated system, synergy develops and everyone profits. This team approach also helps to provide understanding about the system and allows agencies which normally have little or no contact with each other to cooperate toward a common goal for the community.

As executive fire officers we have the power, influence and authority to restructure our fire protection organizations. The future depends on how we direct our activities today. In other words, if we change our present practices and educate the leaders of tomorrow toward a balanced approach to fire protection, we will positively impact the fire and life safety of our community. If we continue to operate primarily as a stand alone emergency response agency, the future will probably resemble the present. We need to change. The good news is - we do not have to change much; we simply need to appreciate that fire protection includes a well balanced and coordinated approach to the delivery of fire protection services which includes comprehensive emergency management. It's not just suppression, or prevention, or EMS, or emergency management - it is some of each, delivered efficiently and effectively.

This will take a "team" approach to be successful. Finally, we must never forget that we serve the public's interest and therefore, customer service and public service are the same thing.

REFERENCE LIST

- Arnold, V (1996, February). Making teams work. *HRFocus*, 12-13.
- Bruegman, R. R. (1994, November). Is your message clear? *Fire Chief*, 45-48.
- Clackamas County. (1998). *Emergency operations plan* (Clackamas County Publication).
- Oregon City, OR: [Author]
- Clackamas County Fire Defense Board. (1997). *Cooperative assistance agreement* (Clackamas County Fire Defense Board Publication). Oregon City, OR: [Author].
- Coleman, R. J. (1997, April). Chief's Clipboard: It's the fire service, not the fire business. *Fire Chief*, 42-43.
- Drabek, T. E., & Hoetmer, G. J. (Eds.) (1991). *Emergency management: Principles and practice for local government*. Washington, DC: International City Management Association.
- Emergency Management and Services, *Oregon Revised Statutes* (ORS) Chapter 401.015 - 401.990 (1995).
- Fagiano, D. (1997, March). The customer-value game continues. *Management Review*, 5.
- Federal Emergency Management Agency. (1994). *Community emergency response team: Participant handbook* (SM-317). Emmitsburg, MD: [Author].
- Federal Emergency Management Agency. (1997). *Project impact: Building a disaster resistant community* [Brochure]. Emmitsburg, MD: [Author].
- Goldsmith, S. (1997, May-June). Can business really do business with government? *Harvard Business Review*, 110-121.

Massnick, F. (1997, March). Customer service can kill you. *Management Review*, 33-35.

McCormick, P. J. (1997, September). Mastering disaster - how to develop a master plan for the "big one". *American Fire Journal*. 18-21.

Mish, F. C. (Ed.). (1985). *Webster's Ninth New Collegiate Dictionary*. Springfield, MA: Merriam-Webster.

Mitchell, L. (1996, December). Customer service heroics: How to dazzle and delight'em. *Fast Forward*, 10-11.

Office of State Fire Marshal (1995). *Oregon fire service mobilization plan* (OFSM Publication). Salem. OR: [Author].

Osborne, D. & Plastrik, P. (1997). Five strategies for reinventing government. [Review of the book *Banishing Bureaucracy*]. *Soundview Executive Book Summaries*, 19 (5) Part 2, 1-8.

Peak, M. H. (1997, March). Customer strategy: The litmus test. *Management Review*, 1.

Snead, G. C. & Porter, R. (1996, February) Restructuring fire and emergency medical services. *Public Management*. 8-14.

Zemke, R. (1997, March). The service revolution: who won? *Management Review*, 10-15.

APPENDIX A

Census 1990, Updates and Projections
Prepared for Clackamas County, Oregon by National Decisions Systems

DEMOGRAPHIC VARIABLES	CCFD #1	OLF D	CITY MIL W	TOTAL
Population: - <u>1990 Census</u>	58,659	27,247	18,185	104,091
- By Race: - <i>White</i>	55,481	25,690	17,170	98,341
<i>- Black</i>	262	133	110	505
<i>- Asian</i>	1,301	548	423	2,272
<i>- Hispanic</i>	1,151	702	367	2,220
<i>- Am. Indian & Other</i>	464	174	115	753
- % Urban Population: - <i>1990 Census</i>	57 %	100 %	100 %	75.8 %
- % Rural Population: - <i>1990 Census</i>	43 %	0	0	24.2 %
Population: - <u>1996 Estimate</u>	68,598	31,024	20,253	119,875
- By Race: - <i>White</i>	65,439	29,582	19,256	114,277
<i>- Black</i>	289	152	119	560
<i>- Asian</i>	1,865	773	572	3,210

<i>- Hispanic ***</i>	n/a	n/a	n/a	n/a
<i>- Am. Indian & Other</i>	1,005	517	297	1,819
Population: - <u>2001 Estimate</u>	75,872	33,859	22,157	131,888
- By Race: - White	70,530	31,392	20,539	122,461
<i>- Black</i>	305	163	129	597
<i>- Asian</i>	2,146	878	654	3,678
<i>- Hispanic</i>	2,333	1,201	692	4,226
<i>- Am. Indian & Other</i>	558	225	143	926

*** The statistical database did not provide this demographic information

DEMOGRAPHIC VARIABLES	CCFD #1	OLF D	CITY MIL W	TOTAL
Population: - <u>2001 Estimate</u>	75,872	33,859	22,157	131,888
- Median Age	36.7	40.5	37.6	n/a
- Average Age	36.2	40.0	38.7	38.3
- By Age: - <i>0-9 years old</i>	9,820	3,750	2,715	16,285
- By Age: - <i>10-17 years old</i>	9,290	3,566	2,224	15,571
- By Age: - <i>18-21 years old</i>	3,877	1,710	960	6,547
- By Age: - <i>22-29 years old</i>	7,723	3,274	2,496	13,493
- By Age: - <i>30-49 years old</i>	24,898	10,164	6,949	42,011
- By Age: - <i>50-59 years old</i>	10,203	4,411	2,593	17,207
- By Age: - <i>60-69 years old</i>	5,179	1,608	1,819	8,606
- By Age: - <i>Total over 70 years old</i>	4,882	5,376	2,401	12,659
Households - <u>1996 Estimate</u>	25,828	13,214	8,927	47,969
- <i>2001 Projected Household</i>	29,015	14,675	9,821	53,511
- <i>1990 Census total occupied housing units</i>	21,345	11,173	7,682	40,200

Persons per Household - <u>1990 Census</u>	2.8	2.4	2.4	Avg = 2.5
Average Travel Time to Work - <u>1990 Census</u>	22.6	21.0	18.6	n/a
Housing by Year Built - <u>1990 Census Total</u>	21,403	11,185	7,647	40,235
- Year built 1989-90	1,152	81	48	1,281
- Year built 1985-88	2,346	613	467	3,426
- Year built 1980-84	2,432	612	392	3,436
- Year built 1970-79	7,604	3,306	1,572	12,482
- Year built 1960-69	3,560	2,721	1,948	8,229
- Year built 1950-59	1,782	1,712	1,567	5,061
- Year built 1940-49	1,114	909	628	2,651
- Year built - prior to 1939	1,413	1,231	1,025	3,669